

May 1, 2013

Ms. Mary C. Patton, P.E.
Director of Regulatory - NMSD
Range Production Company
100 Throckmorton Street, Suite 1200
Fort Worth, Texas 76102

Re: Implementation Report
Fourth Quarterly Sampling Event – February 2013
Quarterly Residential Well Sampling Project
Parker County, Texas
EarthCon Project No. 02.20130063.00

Dear Ms. Patton:

EarthCon Consultants, Inc. (EarthCon) is pleased to provide Range Production Company (Range) this report documenting implementation of the Fourth Quarterly Sampling Event of the *Quarterly Residential Well Sampling Project in Parker County, Texas*.

Activities were conducted in accordance with EarthCon's November 14, 2012 *Revised Scope of Work and Cost Estimate for Environmental Consulting Services* (approved on November 15, 2012) and the *Final Quarterly Residential Well Sampling Work Plan*, dated May 7, 2012 (May 2012 Work Plan, see **Attachment 1**) submitted electronically to Range on May 8, 2012. This report specifically documents collection of water samples from residential wells and coordination with analytical laboratories; evaluation and interpretation of associated data are not part of the scope of work, and hence, are not discussed in this report.

1.0 PREPARATORY ACTIVITIES

Upon receiving approval from Range to implement the Fourth Quarterly Event, EarthCon contacted Accutest Laboratories (Accutest) and Milco Safety Rental to coordinate delivery to EarthCon's offices of needed sample containers, shipping materials and sampling equipment; coordination of delivery of sample containers and shipping materials from Isotech Laboratories (Isotech) was conducted through Mr. Alan Kornacki of Weatherford, a Range consultant.

As required by Range, sampling was conducted only on wells for which the property owner had returned an executed consent form to Range; this resulted in the number of wells to be sampled during the fourth quarterly sampling event to total 16 wells (see **Table 1**). Mary Patton of Range coordinated scheduling of the sampling activities with the property owners and a final schedule was received by EarthCon on February 12, 2013.

2.0 FIELD ACTIVITIES

The EarthCon field crews mobilized to the project area on Thursday February 14, 2013, and commenced preparations for sampling, including acquiring sampling materials and calling the landowners to confirm the visits. Sampling occurred from Friday February 15, 2013 through Monday February 18, 2013, and was performed in general accordance with protocols presented in detail in the May 2012 Work Plan. Field activities, including packing and demobilization, culminated on Monday February 18, 2013. **Table 1** provides a summary of the samples collected during the fourth quarterly sampling event.

The field work was conducted in Level D personal protective equipment (PPE), in accordance with a site-specific Health and Safety Plan (HASP), and after health and safety meetings were conducted at the start of each day. Ambient air readings demonstrated a safe environment with no health or safety concerns. No health or safety incidents occurred during EarthCon's sampling activities.

In general, well water samples were collected from existing sampling ports (e.g., spigots, tank inlet pipes, etc.) prior to softening or other modification/treatment of the water stream, using typical protocols presented in Appendix A of the May 2012 Work Plan.

As noted in **Table 1**, in the cases of wells WW10 and WW18, where samples were collected from a tank inlet, the sample for analysis at Isotech could not be obtained as there was no room to install a hose so that the laboratory-prescribed sampling protocol could be implemented. Additional well water samples were collected for quality control purposes; as shown in **Table 1**, these samples consisted of: a field duplicate (at WW19); a matrix spike/matrix spike duplicate pair (at WW10); two equipment blanks, and two trip blanks (one for each shipped cooler containing samples for analysis of volatile constituents at Accutest).

Samples were labeled, packaged per laboratory instructions, and shipped to Accutest and Isotech via common courier under chain-of-custody documentation. The chain-of-custody forms identified the analyses required for each sample, as established in the May 2012 Work Plan.

Pertinent field observations and measurements were recorded on well-specific field forms, and photographs were taken at each sampling location. The completed field forms and photographic records are grouped per well and presented in **Attachment 2**.

3.0 LABORATORY COORDINATION

EarthCon confirmed receipt of samples at Accutest and Isotech; in addition, for samples submitted for analysis at Accutest, the sample receipt forms were reviewed to verify that samples were received in good condition and were correctly logged for the appropriate analyses.

EarthCon's laboratory coordination activities concluded by verifying that samples submitted to Accutest were analyzed within holding time and that analytical results were provided as requested; analytical data packages and summary tables were directly submitted to Range via electronic mail by Accutest, and are included in **Attachment 3** for ease of reference.

4.0 CLOSING

EarthCon appreciates the opportunity to provide environmental consulting services to Range Production Company. Please do not hesitate to contact the undersigned at (281) 240-5200, if you have any questions regarding this report.

Sincerely,

EarthCon Consultants, Inc.



Gabriela P. Floreslovo
Sr. Project Engineer



J.D. Haines, LPG (IN)
Principal Geologist

Enclosures:

Table 1 – Summary of Samples Collected – February 2013

Attachment 1 – Copy of May 2012 Work Plan

Attachment 2 – Well-Specific Field Forms and Photographic Records

Attachment 3 – Well-Specific Data Packages and Summary Tables (as submitted by Accutest)

Table 1
Summary of Samples Collected
February 2013

Table 1
Quarterly Residential Well Sampling Project
Parker County, TX
Fourth Quaterly Sampling Event - February 2013
Summary of Samples Collected

Water Well Number (WW#)	Property Owner	Sample Collection Date	Sampled Water Condition	Sample Field Identification	Comments
WW1	Rodney and Geraldine Wells	2/15/2013	Untreated	WW01-WEL-021513	
WW2	Michelle Perdue	2/18/2013	Untreated	WW02-PER-021813	
WW6	Amanda M. Thompson	2/15/2013	Untreated	WW06-THO-021513	
WW7	Jeff W. Merryman	2/18/2013	Unknown	WW07-MER-021813	Location of sampling port does not allow for assessment of piping
WW10	Devyn Hayley	2/17/2013	Untreated	WW10-HAY-021713	Volume for MS/MSD collected (Accutest). Collected at tank inlet; therefore, sample for analysis by Isotech cannot be collected
WW11	Harry and Margaret Anderson	2/16/2013	Untreated	WW11-AND-021613	
WW13	Tom Struths	2/17/2013	Untreated	WW13-STR-021713	
WW14A	Stephen and Carol Hurst	2/17/2013	Untreated	WW14A-HUR-021713	
WW15	Stephen and Carol Hurst	2/17/2013	Untreated	WW15-HUR-021713	
WW18	Thomas and Elizabeth Struths	2/17/2013	Untreated	WW18-STR-021713	Collected at tank inlet; therefore, sample for analysis by Isotech cannot be collected
WW19	Joseph and Rebecca Williams	2/16/2013	Untreated	WW19-WIL-021613 DUP-021613	Duplicate collected (Accutest)
WW20	Dennis Huffman	2/16/2013	Untreated	WW20-HUF-021613	
WW21	Kirk and Brenda VanNewkrik	2/15/2013	Untreated	WW21-VAN-021513	
WW22	Timothy and Sheryl Simpson	2/15/2013	Untreated	WW22-SIM-021513	
WW24	Pamela Smith	2/15/2013	Untreated	WW24-SMI-021513	
WW25	Jeff Matthews	2/16/2013	Untreated	WW25-MAT-021613	
	Trip Blank	2/17/2013		TB01-021713	
	Equipment Blank	2/17/2013		EB02-021713	Measuring cup
	Equipment Blank	2/17/2013		EB01-021714	Hose and tubing
	Trip Blank	2/17/2013		TB02-021713	